ABSTRACT OF THE DISCLOSURE

A novel method is disclosed for the allocation of the capacity of a common channel among a number of data producers. In this method, a producer's future allocation grant is based on the extent to which the producer has used a previous allocation grant. The method is applicable to any system wherein the simultaneous use of a common channel by more than one producer may cause a data collision, and an exemplary application to the reverse link of a CDMA telecommunications system is described. Also disclosed are numerous variations and refinements concerning the estimation of remaining channel capacity, the distribution of such capacity among the various producers, and the use of its allocation grant by each producer.